

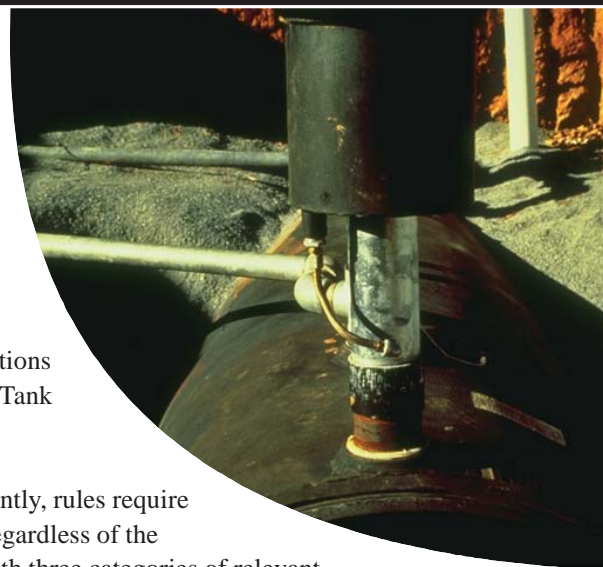
MUST News

Department of Environmental Quality

Winter Issue 2006

DEQ Prepares New Rules for USTs

New, simplified rules enforcing underground storage tank operations in Montana have been proposed by the Waste and Underground Tank Management Bureau of the Department of Environmental Quality.



The rules enact legislation from the 2005 Legislature in House Bill 78. Currently, rules require enforcement actions must be taken against any tank not in full compliance, regardless of the significance of the violation. The new rules propose a significance criteria with three categories of relevant violations: major, moderate, or minor.

Specifically, the rules would:

- establish significance criteria and situational flexibility;
- define the DEQ's corrective action timeframes as 90 days after inspection or operating permit expiration minus 14 days;
- remove full compliance as DEQ's enforcement trigger; and
- eliminate mandatory enforcement.

The new rules also:

- redefine "owner" to be consistent with state law in 75-11-Ch. 3, MCA;
- define "out-of-service;"
- require that substandard, out-of-service tanks be pulled within 12 months;
- extend the 10-day timeframe to submit inspections to the department to 15 days;
- eliminate operating tags;
- establish the operating permit expiration date as DEQ's fixed point for formal enforcement;
- exempt oil/water separators from most regulations;
- eliminate certificate for fees;
- eliminate double notification for ownership change and adds a 30-day timeframe;
- clarify that re-inspection reports need only address non-compliance issues;

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Leak Process

The Department of Environmental Quality Petroleum Release Section (PRS) manages the reporting, investigation, and cleanup of petroleum storage tank (PST) releases under authority of the Montana Underground Storage Tank Act, 75-11-501-526, MCA (“the Act”) and administrative rules, Administrative Rules of Montana (ARM) Title 17, Chapter 56, subchapters 5 and 6. The flowchart on page 3 is a graphical depiction of how a typical release moves through this process. The PRS project officer assigned to each release will guide the PST owners and operators through the process.

The small numbers located in the lower right-hand corner of each box in the flowchart identify the applicable ARM regulating the process represented by the box. Because this flowchart is only a crude simplification of the ARM, you should read the actual ARM to ensure you fully understand your legal obligations. You can find the current listing of ARMs on the Montana Secretary of State website at <http://arm.sos.mt.gov/>. Most owners and operators hire professional environmental consultants to assist in meeting cleanup requirements. However, this does not relieve the tank owner or operator of their responsibilities under the Act and ARMs.

Requirements to report suspected and confirmed PST releases are found at ARM Title 17, Chapter 56, Subchapter 5 (ARM 17.56.501 et. seq). Release reporting, depicted by the boxes on the left portion of the flowchart, was previously discussed in the Fall Issue 2005 MUST News <http://www.deq.mt.gov/UST/MUSTnews.asp> and isn’t repeated here. This article covers the process starting after a release is reported and continuing through the closure process, and is covered in ARM Title 17, Chapter 56, Subchapter 6 (ARM 17.56.601 et. seq).

As the flowchart indicates, the first process required for every release includes Initial Response and Abatement Measures discussed in ARM 17.56.602. Many of the requirements in this rule address situations where a release may still be ongoing or is causing significant harm to human health or the environment. Owners and operators must ensure that all the provisions written in this rule have been accomplished. The PRS project manager assigned to the release will help identify specific abatement requirements for each particular case. Owners and operators must complete a 30-Day Report Form provided by a PRS project manager for all confirmed releases.

Following initial response and abatement measures, releases can take many procedural paths to eventual closure. Arrows

on the diagram indicate many possible paths through the process. The PRS project manager will assist owners and operators through the most appropriate path for their release.

Releases may be evaluated for closure at any stage in the process. For instance; a surface spill of 26 gallons of diesel fuel may be entirely cleaned up during the initial response and abatement measures. If confirmatory sampling indicates that all the diesel fuel was immediately contained and cleaned up, then it is likely the release can be successfully closed without further work.

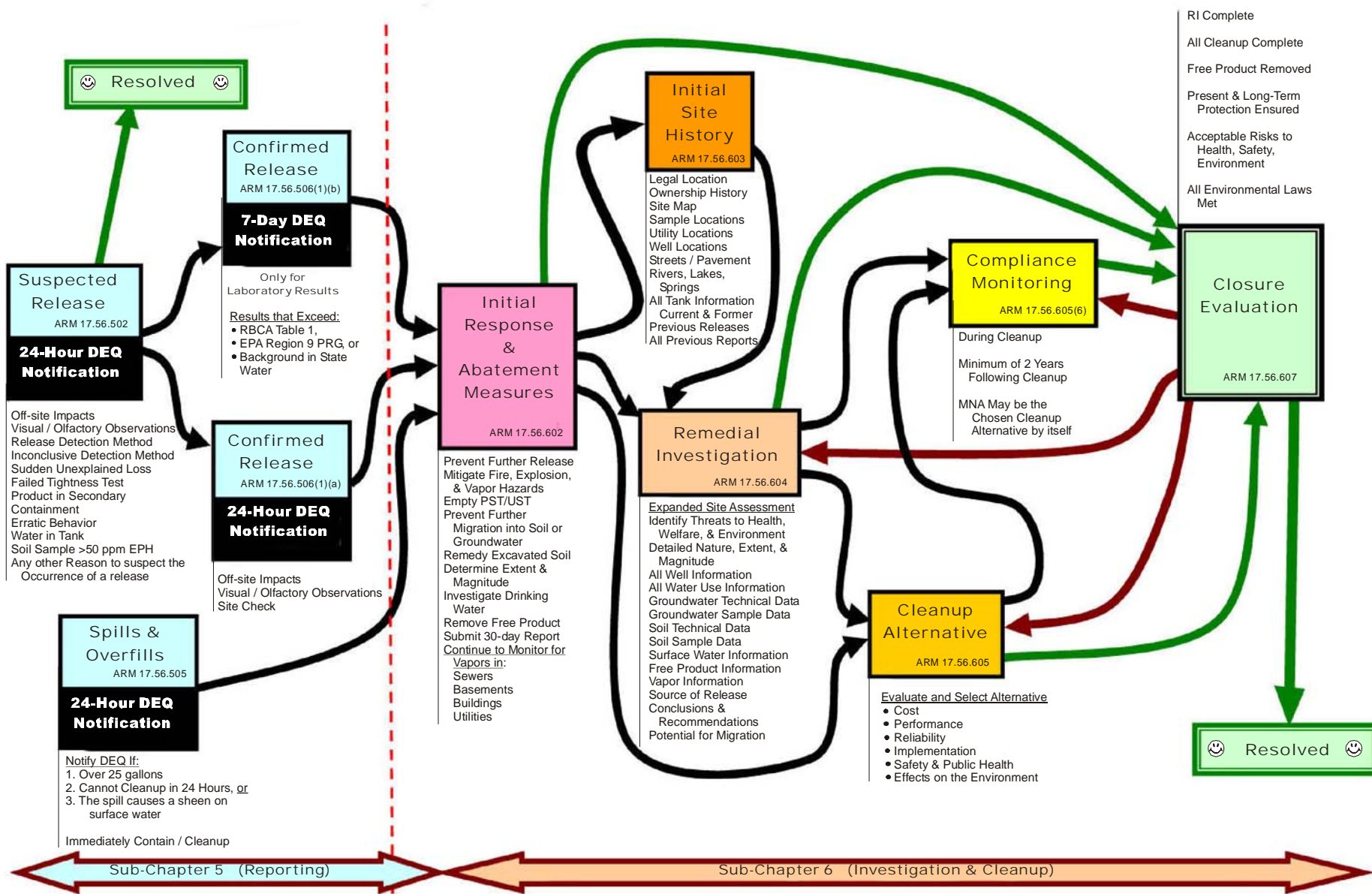
A common path for many releases to take through the process starts with the Initial Response and Abatement Measures and then proceeds to the Initial Site History addressed in ARM 17.56.603. Site history reports document the physical location of the release, current operations at the facility where the release occurred, and historical information concerning the facility where the release occurred.

A remedial investigation addressed under ARM 17.56.604 is an extremely important and detailed part of understanding a release and developing proper cleanup strategies. Remedial investigations gather and report scientific and physical information concerning everything associated with the nature, extent, and magnitude of a release. They also identify and evaluate how the release may threaten human health and the environment. A thorough and accurate remedial investigation may require multiple iterations of field work and reporting. Specific information required to fully investigate a petroleum release are outlined in Technical Guidance #4 – Standard Format for a Remedial Investigation Work Plan/Report; available on the internet at <http://deq.mt.gov/LUST/TechGuidDocs/techguidlist.asp>. Other technical guidance documents located on this website discuss specific details in conducting certain types of investigations and should be reviewed prior to planning a remedial investigation.

ARM 17.56.605 provides criteria that owners and operators must consider when selecting cleanup alternatives. Criteria used to analyze appropriate corrective actions include, but are not limited to cost, performance, reliability, implementation, safety and adequate protection of public health, and the environment. Owners and operators must conduct compliance monitoring discussed in ARM 17.56.605(6) during cleanup activities to evaluate the effectiveness of corrective actions chosen to address a release. Compliance monitoring must continue for a period

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Petroleum Release Investigation and Cleanup Processes



Online Help Now Available for Tank Rules Compliance

The Department of Environmental Quality's Underground Storage Tank Section has introduced a groundbreaking learning and compliance tool for the 900 owners and operators of Montana fueling facilities.

The first of its kind, TankHelper is a free internet-based software program that translates complex petroleum storage tank rules into easy-to-understand instructions. The service asks owners and operators a series of questions online about their facilities and equipment. It follows the answers with information specific to their own tank systems,

After the owner completes the training, TankHelper can create a customized, printable management plan. The plan guides facility operators in the actions they will need to take to stay safe and in compliance, based on their individual storage tank system.

For instance, after the owner identifies their leak detection method, the management plan will indicate: required duties; deadlines for those duties to be performed; record keeping requirements; suggestions for best management practices; and what to do in case of an emergency.

"TankHelper is good for the environment and great for small business" said Bill Rule, DEQ Underground Storage Tank Program Supervisor. "It makes our regulations understandable and plainly spells out how to be in compliance. That prevents leaks and protects groundwater." Currently, owners and operators of underground storage tanks have to sort through pages of technical and often confusing rules and regulations.

TankHelper is the result of an alliance between government and the private sector. The system was funded by a grant from the U.S. Environmental Protection Agency and was cooperatively developed and supported by the DEQ's Underground Storage Tank Section, the Montana Department of Administration's Information Technology Services Division, and Montana Interactive, LLC, a wholly owned subsidiary of eGovernment-provider NIC (Nasdaq: EGOV).

It is available free through the internet at www.Tankhelper.mt.gov. For more information on the online TankHelper, call the Department of Environmental Quality Underground Storage Tank Unit at 444-5300. ■

DEQ Prepares New Rules for USTs - *continued from page 1*

- simplify financial responsibility self-assurance requirements.

The proposed new rules are accessible on the Montana Secretary of State's Web site at <http://www.deq.mt.gov/dir/legal/hearing.asp>.

You can also contact the UST Program by e-mail at ustprogram@mt.us or by phone at (406) 444-5300 and request a copy.

A hearing on the proposed rules is scheduled on March 9, 2006, at 10:30 a.m., in Room 35 of the Metcalf Building, 1520 East Sixth Avenue in Helena.

Written data, views or arguments may also be submitted to Robert A. Martin, Waste and Underground Tank Management Bureau, Department of Environmental Quality, P.O. Box 200901, Helena,

MT 59620-0901; by fax (406) 444-1374; or by email to rmartin@mt.gov, no later than March 16, 2006. To be guaranteed consideration, mailed comments must be postmarked on or before that date. ■

PROPOSED RULES HEARING

March 9, 2006 • 10:30 a.m.
Lee Metcalf Building • Room 35
1520 East Sixth Avenue
Helena, Montana 59620

Enforcement Matters

Since its start in 1997, the Enforcement Division of the Montana Department of Environmental Quality has initiated more than a thousand actions for violations of all Montana environmental laws and regulations. About 17 percent of the cases have been directly related to violations of the Montana Underground Storage Tank Act.

This statute was enacted to protect public health, safety, and the environment. Enforcement takes place when standards are not met.

In 1999, the DEQ started enforcing statutes and rules governing underground storage tank systems against owners. Failure to meet the 1998 upgrade requirements or to permanently close UST systems after being taken out of use for 12 months triggered enforcement actions against storage tank system owners in 1999. Since that first round of enforcement actions, the DEQ has taken action against tank owners for failing to complete a compliance inspection by the initial statutory deadline of January 1, 2000, tank owners who failed to obtain an operating permit and tag by March 1, 2003, and tank owners and operators who operated non-permitted tank systems after April 1, 2003.

Other enforcement actions have been taken against fuel delivery companies that deposited fuel into non-permitted

tanks. Each act of depositing fuel into a non-permitted tank was counted as a separate violation and not by the delivery drop to the facility. Penalties assessed for these violations ranged between \$500 and \$5,000.

The UST Program continues to request enforcement actions for operation and maintenance violations identified during the required compliance inspections. The most commonly cited violations are the failure to provide or perform monthly release detection monitoring based on the owners' and operators' failure to have monthly monitoring records available, and their failure to obtain inspections in a timely manner, as required by the DEQ's administrative rules.

Enforcement actions typically result in assessing a monetary penalty for violations as well as requiring corrective actions. Since 1997, the Enforcement Division has collected more than \$140,000 in penalties for UST-related violations. Many of the enforcement actions and penalties could have been avoided if owners and operators had taken advantage of the extraordinary outreach and compliance assistance offered by the UST Program.

Enforcement begins when compliance assistance fails. Enforcement matters, so pay attention or pay a penalty. There's a choice. ■

Environmental Health Group Honors Dennis Snow

Long-time eastern Montana county sanitarian, Dennis Snow, has received the Montana Environmental Health Association (MEHA) Award for 2005 named in honor of a former Department of Environmental Quality director and U.S. Environmental Protection Agency employee.

The award is given annually to a sanitarian or other Montana citizen who demonstrates outstanding achievement in promoting environmental health in Montana communities.

Snow received the Donald E. Pizzini Outstanding Achievement Award at the MEHA Conference in Bozeman.

The award recognizes Snow's many years of exceptional service to Dawson, Wibaux, and Prairie counties, and his years of assistance to the DEQ through his oversight on numerous petroleum remediation sites. A number of these sites posed significant environmental or public health hazards for communities in eastern Montana. ■

The Meaning of SIR Inconclusive

Some UST owners and operators use Statistical Inventory Reconciliation – abbreviated as SIR – for their monthly release-detection method.

Monthly reports provided by SIR vendors will report results as a “Pass,” “Fail,” or “Inconclusive” for each UST system. Pass and Fail results are easily understood by owners and operators:

If all your tanks pass, then everything is okay and you simply retain the report for at least one year.

If a tank fails, then you call DEQ to report a suspected release within 24 hours of receiving the report.

Inconclusive reports, however, may not be well understood. SIR methods typically report inconclusive results when the data provided to the SIR vendor is not adequate to calculate the appropriate leak detection standard. It does not mean that you have a leak, but you cannot prove that you do not have a leak either. This means that your tank(s) in question is out of compliance with leak detection requirements. Under Montana’s suspect release reporting rules, you are required to report all inconclusive SIR results to DEQ as suspect releases. To report a suspect release call DEQ’s release line at 1-800-457-0568. You will be connected to a project manager who will give you further information on what to do next.

Inconclusive results can be avoided in many cases by increasing the quality of data you provide to your SIR vendor. Your SIR vendor will provide specific requirements on how to collect and record high quality data, but here are a few guidelines to remember:

- You must measure the product levels accurately to the nearest one-eighth inch at the same time every

day that the site operates. You can increase accuracy by having the same person take the readings every time and by taking two stick readings before converting to gallons.

- Water must also be measured to the same standard. This is typically only required monthly, but your SIR vendor will let you know their specific requirement.
- Record dispenser sales at the same time you stick your tanks. No dispensing can occur between product level readings and meter readings. So you should pick a time of day that is convenient to shut down your pumps for taking your measurements and when your operator is less likely to be distracted by other duties.
- Record all delivery information accurately and as it appears on the bills of lading. Your SIR vendor will tell you whether to record gross or net delivery figures.
- Do your own daily calculations for overages and shortages. If you find a discrepancy, it will be easier to correct it then.
- The equipment used must be capable of measuring product levels over the full range of the tank’s height.
- Keep the records for each tank separate. A very common mistake is to record readings from the wrong tank. You could consider marking your fill pipes with painted or tagged numbers or letters to reduce the probability of mixing up your readings. Try and take your readings in the same order each day to establish a routine.
- If tanks are manifolded together, sales and delivery information may be combined. However, separate tank product level readings must be recorded separately for every tank in the manifold set. ■

Leak Process - *continued from page 2*

of at least two years or other reasonable period approved by the department, after completion of cleanup activities.

Once an owner or operator has achieved all the release response and corrective action requirements outlined in Subchapter 6, a release will be evaluated for closure as outlined in ARM 17.56.607(4). Technical Guidance 9 – Petroleum Release Closure, which can be located on the internet at <http://deq.mt.gov/LUST/TechGuidDocs/>

[techguidlist.asp](http://deq.mt.gov/LUST/TechGuidDocs/techguidlist.asp) outlines procedures used to evaluate releases for closure. Because criteria outlined in Technical Guidance 9 must be achieved before a release can be resolved, owners and operators should consult this document early in their release management process to ensure their activities, information, and documentations will be adequate to receive a ‘no further action’ letter from the department. ■

Diesel With a Difference

By Kristi Albertson, *Daily Inter Lake, Kalispell, Jan. 18, 2006*
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In an age of rising fuel prices and increasing environmental awareness, one Kalispell service station is embracing alternative fuel.

Michael's West Exxon at 1011 U.S. 2, now offers B5, a blend of 5 percent biodiesel (made from soybeans) and 95 percent petroleum diesel. This is the first station in the Flathead Valley to offer a biodiesel blend to the general public.

Michael Hayes, owner of the service station, said he looked into biodiesel after hearing people complain about having nowhere in the area to buy it.

"There are people out there who want to make their little difference, whatever that may be," Hayes said. "I'm impressed that people care enough about the environment to complain about it."

However there have not been enough complaints for Hayes to install a biodiesel pump at his second station at 1645 U.S. 93 South. Installation here he said would depend on how successful sales were at Michael's West.

A long proponent of alternative fuel sources, Governor Brian Schweitzer will pump a few ceremonial gallons at Michael's West on January 24.

"He is excited to participate in the event," said Adam Pimley, deputy director of communications in the governor's office. "He hopes that it brings a little more excitement and awareness around biodiesel."

Proponents say biodiesel improves air quality by creating fewer emissions. According to the National Biodiesel Board, using the alternative fuel "essentially eliminates" sulfur emissions.

And because it has a biological source, carbon in biodiesel emissions is recycled from carbon already present in the atmosphere rather than taken from fossil fuels. Furthermore, carbon monoxide emissions are about 48 percent lower from pure biodiesel (B100) than from pure petroleum diesel, according to the National Biodiesel Board.

Hayes was excited about these reduced environmental impacts. He was also intrigued by using renewable resources instead of fossil fuels.

"In my business, it's not often that you get to do something to help the environment," he said. "When you're in the fuel business, you can't help but think about sustainable resources."

Biodiesel is produced by separating glycerin from animal fat or vegetable oil. When the glycerin is removed, methyl esters – biodiesel – are left behind.

Biodiesel is available commercially in its pure form but is more commonly found as a blend, like the B5 at Michael's West. It can be blended with diesel fuel at any level.

Hayes originally offered B20, a blend that was 20 percent biodiesel. However, he changed his blend because drivers wanted a smaller blend. Plus B5 still has environmental benefits.

"I offered the best product I could find, and with the most biodiesel, thinking the more biodiesel I used, the more good I'd be doing," he said. "But it's surprising what 5 percent can do."

Although all equipment in Glacier National Park has run on biodiesel for the last couple of years, this is the first time a biodiesel blend has been offered commercially in the Flathead Valley, said Drew Pike, a field representative for fuel distributor City Service Valcon.

Biodiesel also is available in Belgrade, Bozeman, and Missoula.

"We think it's a great product," said Paul Miller, president of Sustainable Systems, a Missoula-based company that manufactures products made from renewable resources and the impetus behind biodiesel being offered in Missoula. "We have a loyal customer base that keeps coming back to it."

In addition to improving air quality, biodiesel can improve engine performance.

"A lot of people say, 'I'm going to pay more for it, so why should I do it? To help the environment?'" Pike said. "Well, that, yes, and it's a better performing product."

Biodiesel gives engines higher lubricity. A blend of 1 percent biodiesel and 99 percent petroleum diesel can increase lubricity by at least 30 percent, according to Sustainable Systems.

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Diesel With a Difference - *continued from page 7*

Using biodiesel can actually extend engine life, Hayes, said. It slows corrosion, removes deposits and burns cleaner than regular diesel. "It is a great product, a very consistent high-quality product," he said.

Biodiesel can be used in most diesel engines without modifications. This can vary, though, depending on the percentage of biodiesel in the blend and the vehicle's age.

"Biodiesel works as a cleansing agent that could break down rubber," said Amber Thurlo Pearson, communications specialist for the National Biodiesel Board. "In an older vehicle, 1994 or older, you'll want to replace the natural rubber components in your engine if you're using high-blend or pure biodiesel."

One thing that might deter drivers from using biodiesel, though, is price. Biodiesel blends are typically more expensive than petroleum diesel. At Michael's Exxon West, biodiesel is \$2.59 per gallon, while regular diesel is \$2.44.

"Biodiesel is coming down in price to make it closer to regular diesel," Thurlo Pearson said. "Biodiesel might still be a little bit more, but that gap in general is decreasing."

Part of the reason is the biodiesel tax incentive, a federal excise tax credit equal to one penny per percent of biodiesel in a fuel blend. For the B5 offered at Michael's Exxon West, that means 5 cents per gallon of biodiesel. The incentive is offered to fuel distributors.

However, biodiesel is still more expensive than petroleum diesel for fuel distributors and consumers alike. "Even though they're giving us a tax incentive, it still doesn't close the gap," Pike said.

For Hayes, some things are more important than closing that gap.

"We're not adding something to save money," he said. "We're adding something to increase performance and reduce emissions."

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